

What is claimed is:

1           1.       A method comprising:  
2           capturing an optical image to form raw data indicative of the optical image;  
3           using values in a look-up table to transform the raw data into transformed data  
4           indicative of a second image;  
5           computing a white color balance of the second image; and  
6           modifying the values in the look-up table based on the computed white color  
7           balance.

1           2.       The method of claim 1, further comprising repeating the using, computing  
2           and modifying until the computed white color balance is at an acceptable level.

1           3.       The method of claim 1, further comprising repeating the using, computing  
2           and modifying for a predetermined number of iterations.

1           4.       The method of claim 3, wherein the number of iterations depends on  
2           whether the capturing is used to capture a still image or video.

1           5.       The method of claim 1, further comprising:  
2           modifying the transformed data to compensate for differences in responses to the  
3           optical image between the image sensor and a human eye.

1           6.       The method of claim 5, further comprising:  
2           modifying the result of the modification of the transformed data to convert the  
3           result into a predetermined color space.

1           7.       The method of claim 1, further comprising:  
2           before the transformation, modifying the raw data to interpolate pixel colors.

1 8. An image processing circuit comprising:  
2 an image sensor to capture an optical image to form raw data indicative of the  
3 optical image;  
4 a look-up table storing values to transform the raw data into transformed data  
5 indicative of a second image;  
6 a white color balance circuit to compute a white color balance of the second  
7 image; and  
8 a second circuit to modify the values in the look-up table based on the computed  
9 white color balance.

1 9. The image processing circuit of claim 8, wherein, for a single capture by  
2 the image sensor, the second circuit repeatably modifies the values in the look-up table  
3 and uses the white color balance circuit to compute the white color balance until the  
4 computed white color balance is at an acceptable level.

1 10. The image processing circuit of claim 8, wherein, for a single capture by  
2 the image sensor, the second circuit repeatably modifies the values in the look-up table  
3 and uses the white color balance circuit to compute the white color balance for a  
4 predetermined number of iterations.

1 11. The image processing circuit of claim 8, wherein the number of iterations  
2 depends on whether the capturing is used to capture a still image or video.

1 12. The image processing circuit of claim 8, further comprising:  
2 a color correction circuit to modify the transformed data to compensate for  
3 differences in responses to the optical image between the image sensor and a human eye.

1 13. The image processing circuit of claim 8, further comprising:  
2 a color space conversion circuit to convert the transformed data into a  
3 predetermined color space.

1 14. The image processing circuit of claim 8, further comprising:  
2 an interpolation circuit to modify the raw data to interpolate pixel colors.

1 15. The image processing circuit of claim 8, wherein the image processing  
2 circuit comprises a camera.

1 16. An article comprising a storage medium readable by a processor-based  
2 system, the medium storing instructions to cause a processor to:  
3 use values stored in a look-up table to transform raw data provided by an image  
4 sensor into transformed data that indicates an image,  
5 compute a white color balance of the image, and  
6 modify the values in the look-up table based on the computed white color balance.

1 17. The article of claim 16, the instructions causing the processor to repeatably  
2 modify the values in the look-up table and compute the white color balance until the  
3 computed white color balance is at an acceptable level.

1 18. The article of claim 16, the instructions causing the processor to repeatably  
2 modify the values in the look-up table and computer the white color balance for a  
3 predetermined number of iterations.